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**COMSATS INSTITUTE OF INFORMATION TECHNOLOGY**

**Electrical Engineering Department (Islamabad Campus)**

**Team Lead: Adeel Israr**

**Team Members: Khiyam Iftikhar**

**List of Experiments**

**Computer Organization (EEE 323)**

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| **Lab #** | **Details** |
| 01 | Introduction to MIPS Assembly using MIPS Simulator (MARS) |
| 02 | Strings and Conditional Execution |
| 03 | Procedures |
| 04 | Introduction to Verilog HDL (Gate Level Modeling) |
| 05 | Introduction to Verilog HDL (Continuous Assignment) |
| 06 | Introduction to Verilog HDL (Cyclic Behavior) |
| 07 | Digital System Controller (State Machine ) |
| 08 | Digital System Datapath (RTL Modeling ) |
| 9 | MIPS Datapath(Single Cycle) I (GetInstruction) |
| 10 | MIPS Datapath(Single Cycle) II (GetOperands Components) |
| 11 | MIPS Datapath(Single Cycle) III (GetOperands combined with GetInstruction) |
| 12 | MIPS Datapath(Single Cycle) III (ALU and Control) |
| 13 | MIPS Datapath(Single Cycle) IV (Branch and Data Memory) |

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Course Instructor